Some TNFi Agents Raise Infections Odds More

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Patients taking monoclonal anti–tumor necrosis factor antibody therapy were more likely than those on soluble TNF inhibiting therapy to develop opportunistic infections, other than tuberculosis, in a study of a French national registry.

Of the three TNFi agents used in France in 2004-2007, infliximab was associated with an 18-fold increased risk and adalimumab was associated with a 10-fold increased risk for nontuberculosis opportunistic infection, compared with etanercept, Dr. Dominique Salmon-Ceron and her associates reported. A higher incidence of opportunistic infection with infliximab or adalimumab, compared with etanercept, did not reach statistical significance because of the rarity of the infections. But the findings are supported by previous reports from the Food and Drug Administration, a Spanish registry, a study of 21 Japanese patients, and other accounts of a greater risk for opportunistic infection with infliximab, compared with etanercept, the investigators noted (Ann. Rheum. Dis. 2010 Dec. 21 [doi:10.1136/ard.2010.137422]).

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Major Finding: Opportunistic infections other than tuberculosis were 18 times more likely in patients on infliximab and 10 times more likely in patients on adalimumab, compared with patients on etanercept.

Data Source: A study of a French national registry of all patients with opportunistic infections while they were on TNFi agents, and case-control analysis of 43 patients with 45 non-TB opportunistic infections and 3 matched control patients without infection on anti-TNF agents.

Disclosures: Some of Dr. Salmon-Ceron's coauthors have been consultants or speakers for Abbott, Schering Plough, UCB, or Wyeth. The study was funded by Abbott, Schering Plough, Wyeth, and INSERM (Institut National de la Santé et de la Recherche Médicale.

The study also identified a third risk factor: treatment with more than 10 mg/day of oral steroids or IV steroid boluses during the year before a diagnosis of non-TB opportunistic infection. Previous studies also identified this risk factor in patients with rheumatoid arthritis or systemic lupus erythematosus, so the current analysis "strengthens the need to avoid high doses of steroids for patients receiving anti-TNF agents," reported Dr. Salmon-Ceron, who is professor of infectious diseases at Université René Descartes, Paris, as well as a member of the staff at of Hôpital Cochin in that city.

The data in the study come from the 3-year French RATIO (Research Axed on Tolerance of Biotherapies) registry and involved all cases in France of opportunistic infections in patients receiving TNFi agents for any reason. The case-control analysis matched each of the 43 case patients (with a total of 45 opportunistic infections) with 3 control patients who took TNFi agents without developing opportunistic infections.

Patients had been treated with TNFi agents for RA (26), spondyloarthritides (3), inflammatory colitis (8), psoriasis (1), or other problems (5). Four were on etanercept, 10 received adalimumab, and 39 were on infliximab.

Using pharmaceutical company data, the investigators estimated a total of 57,711 patient-years of use of TNFi therapy during the study period. They calculated an annual incidence of opportunistic infection in patients receiving TNFi agents as 152 per 100,000 patient-years, after adjusting for age and sex.

The incidence of opportunistic infection differed by TNFi agent, but the differences were not statistically significant (7 per 100,000 patient-years with etanercept, 62 per 100,000 patient-years with adalimumab, and 291 per 100,000 patient-years with infliximab). The rarity of opportunistic infections prevented statistical significance in comparisons. ■